

040104

17264

U.S. PTO

PTO/SB/05 (01-04)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|  |                               |                                  |
|--|-------------------------------|----------------------------------|
| <b>UTILITY<br/>PATENT APPLICATION<br/>TRANSMITTAL</b><br><br>(Only for new nonprovisional applications under 37 CFR 1.53(b)) | <b>Attorney Docket No.</b>    | 8021-227 (SS-19246-US)           |
|  | <b>First Inventor</b>         | Soon-Hong AHN                    |
|  | <b>Title</b>                  | Semiconductor Device Capable.... |
|  | <b>Express Mail Label No.</b> | EV 480875151US                   |

|   |   |
|---|---|
| <b>APPLICATION ELEMENTS</b><br>See MPEP chapter 600 concerning utility patent application contents. | <b>ADDRESS TO:</b><br>Mail Stop Patent Application<br>Commissioner for Patents<br>P.O. Box 1450<br>Alexandria VA 22313-1450 |
|---|---|

|   |   |
|---|---|
| <p>1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17)<br/>(Submit an original and a duplicate for fee processing)</p> <p>2. <input type="checkbox"/> Applicant claims small entity status.<br/>See 37 CFR 1.27.</p> <p>3. <input checked="" type="checkbox"/> Specification [Total Pages <u>19</u>]<br/>(preferred arrangement set forth below)<br/>- Descriptive title of the invention<br/>- Cross Reference to Related Applications<br/>- Statement Regarding Fed sponsored R &amp; D<br/>- Reference to sequence listing, a table,<br/>or a computer program listing appendix<br/>- Background of the Invention<br/>- Brief Summary of the Invention<br/>- Brief Description of the Drawings (if filed)<br/>- Detailed Description<br/>- Claim(s)<br/>- Abstract of the Disclosure</p> <p>4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets <u>4</u>]</p> <p>5. Oath or Declaration [Total Sheets <u>2</u>]<br/>a. <input checked="" type="checkbox"/> Newly executed (original or copy)<br/>b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d))<br/>(for continuation/divisional with Box 18 completed)<br/>i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b><br/>Signed statement attached deleting inventor(s)<br/>name in the prior application, see 37 CFR<br/>1.63(d)(2) and 1.33(b).</p> <p>6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76</p> | <p>7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or<br/>Computer Program (Appendix)</p> <p>8. Nucleotide and/or Amino Acid Sequence Submission<br/>(if applicable, all necessary)<br/>a. <input type="checkbox"/> Computer Readable Form (CRF)<br/>b. Specification Sequence Listing on:<br/>i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or<br/>ii. <input type="checkbox"/> Paper<br/>c. <input type="checkbox"/> Statements verifying identity of above copies</p> <p><b>ACCOMPANYING APPLICATION PARTS</b></p> <p>9. <input checked="" type="checkbox"/> Assignment Papers (cover sheet &amp; document(s))</p> <p>10. <input type="checkbox"/> 37 CFR 3.73(b) Statement <input checked="" type="checkbox"/> Power of<br/>(when there is an assignee) Attorney</p> <p>11. <input type="checkbox"/> English Translation Document (if applicable)</p> <p>12. <input type="checkbox"/> Information Disclosure <input type="checkbox"/> Copies of IDS<br/>Statement (IDS)/PTO-1449 Citations</p> <p>13. <input type="checkbox"/> Preliminary Amendment</p> <p>14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503)<br/>(Should be specifically itemized)</p> <p>15. <input checked="" type="checkbox"/> Certified Copy of Priority Document(s)<br/>(if foreign priority is claimed)</p> <p>16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122<br/>(b)(2)(B)(i). Applicant must attach form PTO/SB/35<br/>or its equivalent</p> <p>17. <input checked="" type="checkbox"/> Other: <b>Credit Card Payment Form PTO-2038</b><br/>for \$842.00 &amp; \$40.00</p> |
|---|---|

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: .....

Prior application information:

Examiner .....

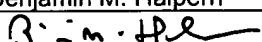
Art Unit: .....

For CONTINUATION OR DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**

☐ Customer Number: ..... OR ☐ Correspondence address below

|         |                                    |           |              |          |              |
|---------|------------------------------------|-----------|--------------|----------|--------------|
| Name    | Frank Chau, Esq.                   |           |              |          |              |
| Address | F. CHAU & ASSOCIATES, LLC          |           |              |          |              |
|         | 1900 Hempstead Turnpike, Suite 501 |           |              |          |              |
| City    | East Meadow                        | State     | New York     | Zip Code | 11554        |
| Country | USA                                | Telephone | 516-357-0091 | Fax      | 516-357-0092 |

|                   |   |                                   |        |
|-------------------|---|-----------------------------------|--------|
| Name (Print/Type) | Benjamin M. Halpern   | Registration No. (Attorney/Agent) | 46,494 |
| Signature         |  | Date                              | 4/1/04 |

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

22858 U.S. PTO  
10/815448

040104

040104

17264 U.S. PTO

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**FEE TRANSMITTAL  
for FY 2004**

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$ 882.00)**Complete if Known**

|                      |                        |
|----------------------|------------------------|
| Application Number   |                        |
| Filing Date          | April 1, 2004          |
| First Named Inventor | Soon-Hong AHN          |
| Examiner Name        |                        |
| Art Unit             |                        |
| Attorney Docket No.  | 8021-227 (SS-19246-US) |

**METHOD OF PAYMENT (check all that apply)**
☐ Check ☒ Credit card ☐ Money Order ☐ Other ☐ None
☐ Deposit Account:Deposit Account Number  
50-0679Deposit Account Name  
F. CHAU & ASSOCIATES, LLC

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments☐ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description        | Fee Paid           |
|----------------------------|----------------------------|------------------------|--------------------|
| 1001 770                   | 2001 385                   | Utility filing fee     | 770.00             |
| 1002 340                   | 2002 170                   | Design filing fee      |                    |
| 1003 530                   | 2003 265                   | Plant filing fee       |                    |
| 1004 770                   | 2004 385                   | Reissue filing fee     |                    |
| 1005 160                   | 2005 80                    | Provisional filing fee |                    |
| <b>SUBTOTAL (1)</b>        |                            |                        | <b>(\$ 770.00)</b> |

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

| Total Claims       | Extra Claims | Fee from below | Fee Paid |
|--------------------|--------------|----------------|----------|
| 24                 | -20** = 4    | 18             | 72       |
| 3                  | -3** = 0     | 86             | 0        |
| Multiple Dependent |              | 290            | 0        |

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description  | Fee Paid          |
|----------------------------|----------------------------|--|-------------------|
| 1202 18                    | 2202 9                     | Claims in excess of 20                                     |                   |
| 1201 86                    | 2201 43                    | Independent claims in excess of 3                          |                   |
| 1203 290                   | 2203 145                   | Multiple dependent claim, if not paid                      |                   |
| 1204 86                    | 2204 43                    | ** Reissue independent claims over original patent         |                   |
| 1205 18                    | 2205 9                     | ** Reissue claims in excess of 20 and over original patent |                   |
| <b>SUBTOTAL (2)</b>        |                            |  | <b>(\$ 72.00)</b> |

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description  | Fee Paid |
|----------------------------|----------------------------|--|----------|
| 1051 130                   | 2051 65                    | Surcharge - late filing fee or oath  |          |
| 1052 50                    | 2052 25                    | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053 130                   | 1053 130                   | Non-English specification  |          |
| 1812 2,520                 | 1812 2,520                 | For filing a request for <i>ex parte</i> reexamination                     |          |
| 1804 920*                  | 1804 920*                  | Requesting publication of SIR prior to Examiner action                     |          |
| 1805 1,840*                | 1805 1,840*                | Requesting publication of SIR after Examiner action                        |          |
| 1251 110                   | 2251 55                    | Extension for reply within first month                                     |          |
| 1252 420                   | 2252 210                   | Extension for reply within second month                                    |          |
| 1253 950                   | 2253 475                   | Extension for reply within third month                                     |          |
| 1254 1,480                 | 2254 740                   | Extension for reply within fourth month                                    |          |
| 1255 2,010                 | 2255 1,005                 | Extension for reply within fifth month                                     |          |
| 1401 330                   | 2401 165                   | Notice of Appeal   |          |
| 1402 330                   | 2402 165                   | Filing a brief in support of an appeal                                     |          |
| 1403 290                   | 2403 145                   | Request for oral hearing   |          |
| 1451 1,510                 | 1451 1,510                 | Petition to institute a public use proceeding                              |          |
| 1452 110                   | 2452 55                    | Petition to revive - unavoidable   |          |
| 1453 1,330                 | 2453 665                   | Petition to revive - unintentional   |          |
| 1501 1,330                 | 2501 665                   | Utility issue fee (or reissue)   |          |
| 1502 480                   | 2502 240                   | Design issue fee   |          |
| 1503 640                   | 2503 320                   | Plant issue fee  |          |
| 1460 130                   | 1460 130                   | Petitions to the Commissioner  |          |
| 1807 50                    | 1807 50                    | Processing fee under 37 CFR 1.17(q)  |          |
| 1806 180                   | 1806 180                   | Submission of Information Disclosure Stmt                                  |          |
| 8021 40                    | 8021 40                    | Recording each patent assignment per property (times number of properties) | 40.00    |
| 1809 770                   | 2809 385                   | Filing a submission after final rejection (37 CFR 1.129(a))                |          |
| 1810 770                   | 2810 385                   | For each additional invention to be examined (37 CFR 1.129(b))             |          |
| 1801 770                   | 2801 385                   | Request for Continued Examination (RCE)                                    |          |
| 1802 900                   | 1802 900                   | Request for expedited examination of a design application                  |          |

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)** (\$ 40.00)**SUBMITTED BY**

(Complete if applicable)

|                   |                      |                                   |        |           |              |
|-------------------|----------------------|-----------------------------------|--------|-----------|--------------|
| Name (Print/Type) | Benjamin M. Halpern  | Registration No. (Attorney/Agent) | 46,494 | Telephone | 516-357-0091 |
| Signature         | <i>B. M. Halpern</i> | Date                              | 4/1/04 |           |              |

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

**SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PATENT

Atty. Docket No. 8021-227 (SS-19246-US)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

APPLICATION FEE TRANSMITTAL

Sir:

Transmitted herewith for filing is the patent application of

Inventor(s): SOON-HONG AHN, JUNG-HWA LEE

For: SEMICONDUCTOR DEVICE CAPABLE OF PREVENTING CURRENT  
FLOW CAUSED BY LATCH-UP AND METHOD OF FORMING THE  
SAME

This application is a:

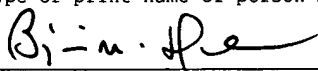
- ☒ New Application  
☐ Continuation  
☐ Continuation-In-Part (CIP)  
☐ Divisional

of co-pending U.S. application Serial No. \_\_\_\_\_  
filed on \_\_\_\_\_.

CERTIFICATION UNDER 37 C.F.R. § 1.10

I hereby certify that this Application transmittal and the documents referred to as enclosed are being deposited with the United States Postal Service on this date April 1, 2004 in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EV480875151US addressed to: Mail Stop Patent Application, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

Benjamin M. Halpern  
(Type or print name of person mailing paper)

  
(Signature of person mailing paper)

**Enclosed are:**

- [X] 11 page(s) of specification  
[X] 1 page(s) of Abstract  
[X] 7 page(s) of claims  
[X] 4 sheets of drawings [X] formal [ ] informal  
[X] 2 page(s) of Declaration and Power of Attorney

[X] An Assignment of the invention to:

SAMSUNG ELECTRONICS CO., LTD

- [ ] This application claims the benefit under 35 U.S.C. §119(e) of U.S. Provisional Application(s) No(s):

APPLICATION NO(S):

FILING DATE

- [X] Priority under Title 35 United States Code, § 119 is claimed from:

Country

Appln. No.

Filed

KOREA

2003-28176

2 May 2003

[X] Certified copy of which:

[X] is enclosed

[ ] will follow.

**Additional papers enclosed:**

- [ ] Preliminary Amendment  
The fees to be charged are to be based on the number of claims remaining as a result of the attached Preliminary Amendment.  
[ ] Information Disclosure Statement  
[ ] Form PTO-1449  
[ ] Other

**Fee Calculation (37 C.F.R. §1.16)**

| For                             | Number<br>Filed | Number<br>Extra | Rate       | Basic Fee |
|---------------------------------|-----------------|-----------------|------------|-----------|
|                                 |                 |                 |            | \$ 770.00 |
| Total<br>Claims*                | 24 - 20 =       | 4               | x \$ 18.00 | \$ 72.00  |
| Independent<br>Claims           | 3 - 3 =         | 0               | x \$ 86.00 | \$ .00    |
| Multiple<br>Dependent<br>Claims | [ ] yes         | Add'l. Fee      | \$290.00   | \$        |
|                                 | [X] no          | Add'l. Fee      | None       | = \$      |
| TOTAL                           |                 |                 |            | \$ 842.00 |

[ ] Applicant Claims Small Entity Status Under 37 C.F.R. § 1.27. Reduced fees under 37 C.F.R. § 1.9(f) (50% of total) paid herewith \$ .00.

[X] Please charge fee of **\$40.00** For recording the attached Assignment by Credit Card Payment Form PTO-2038 enclosed herewith.

[X] Please charge fee of **\$842.00** to cover the filing fee by Credit Card Payment Form PTO-2038 enclosed herewith

[ ] Charge fee to Deposit Account No. 50-0679. Order No.            TWO (2) COPIES OF THIS SHEET ARE ENCLOSED.

---

\* Includes all independent and single dependent claims and all claims referred to in multiple claims. See 37 C.F.R. § 1.75(c).

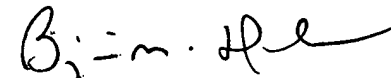
[X] Please charge any deficiency as well as any other fee(s) which may become due under 37 C.F.R. § 1.16 and/or 1.17 at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account No. 50-0679. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. 50-0679 therefor. TWO (2) COPIES OF THIS SHEET ARE ENCLOSED.

Relate Back - 35 U.S.C. § 120

[ ] Amend the specification by inserting after the Title the sentence:

--This is a [ ] continuation [ ] continuation-in-part [ ] divisional of copending application Serial No. \_\_\_\_\_ filed on \_\_\_\_\_, the disclosure of which in its entirety is incorporated-by-reference herein.--

Date: 4/1/04



SIGNATURE OF ATTORNEY  
Benjamin M. Halpern  
Reg. No. 46,494

F. CHAU & ASSOCIATES, LLC  
1900 Hempstead Turnpike, Suite 501  
East Meadow, New York 11554  
Tel. No. (516) 357-0091  
Fax. (516) 357-0092

FC/BMH:mel